why they go on to move away earlier than grazing animals, unless having risen somehow predisposes them to move.

The longer flight distances in resting females with kids, compared to those without, may reflect the vulnerability of the young, which were only a month old and had just emerged on the meadows from the cliff nursery areas. Cederna and Lovari (unpublished) found similarly that alert distance was significantly greater in flocks containing a large proportion of kids.

Flight distances decreased in the course of the study, presumably as the animals habituated to the same person moving quietly among them in a predictable way. It is also possible that the observer was learning how to approach more effectively, but care was taken to maintain a uniform technique throughout the study. The failure of ear-tagged and other individuals approached several times to show any consistent decrease in flight distance may be due to the small number of approaches to each animal and the long gaps between some of the successive tests. McLaren and Green (1985) similarly found no consistent effect of repeated approaches to musk oxen *Ovibos moschatus*.

Habituation effects can explain the differences in flight distance between areas, with the shortest in the area most visited by people (Pass) and the longest in the most remote area (Mt. Amaro), where there was also the possibility of some poaching (S. Lovari, pers. comm.). In the main study areas, Cederna and Lovari (unpublished) showed a decrease in mean flight distance from 25 m in 1977–78 to 19 m in 1981–82. This reduction has apparently continued, to the 11 m found in the present study, presumably as the animals have continued to habituate to the close proximity of people.

The results of this study are encouraging for the conservation of chamois; younger animals appear not to be more affected by disturbance than older ones, as had been feared, and flocks in close proximity to heavily visited areas appear to be habituating progressively to human presence. Recent improvements in visitor control in the Val di Rose, whereby in the busiest period (July and August) visitors are mainly confined to guided parties restricted to the marked trails by increased wardening, seem greatly to have reduced the kind of harassment of the animals described by Cederna and Lovari (1985). Continued "benign" exposure to people should encourage further habituation of the animals and so reduce the effects of visitors on them.

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Zusammenfassung

Reaktionen apenninischer Gemsen auf menschliche Störung

Diese Untersuchung befaßte sich mit der Wirkung menschlicher Störung auf das Verhalten verschiedener Altersgruppen von apenninischen Gemsen, *Rupicapra pyrenaica ornata,* in drei Regionen mit verschieden häufiger menschlicher Anwesenheit im oberen Val di Rose, Abruzzo Nationalpark, Italien, im Juli 1986.

Bei standardisierten Annäherungsversuchen wurde kein signifikanter Unterschied bei den Fluchtdistanzen zwischen Männchen und Weibchen oder zwischen grasenden und ruhenden Tieren gefunden, aber die Fluchtdistanzen von einjährigen und sub-adulten Gemsen waren statistisch bedeutend kürzer als die von jungen Adulten. Weibchen mit Jungen hatten statistisch größere Fluchtdistanzen als Weibchen ohne Junge, obwohl dieser Unterschied nur ruhende Tiere betraf. Die Fluchtdistanzen waren am kürzesten in der am häufigsten besuchten Region und am größten in der abgelegensten. Es gab Anzeichen dafür, daß wiederholte Begegnung mit Menschen zur Gewöhnung führte.

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First record of the Pygmy killer whale, *Feresa attenuata* Gray, 1875 from Peru, with a summary of distribution in the eastern Pacific

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The distribution of the pygmy killer whale, *Feresa attenuata* Gray, 1875 was reviewed by Perrin and Hubbs (1969) and by Ross and Leatherwood (in press), and is assumed to be circumglobal in tropical and subtropical waters. The first record of this species from the eastern Pacific was a juvenile captured in May 1967 during commercial tuna fishing operations 300 to 400 nautical miles off Costa Rica (Perrin and Hubbs 1969). National Marine Fisheries (NMFS) observers aboard U.S.-registered tuna purse seiners operating in the eastern tropical Pacific reported 25 sightings of pygmy killer whales in the period 1971–1985 (as summarized in the Figure; Perrin, pers. comm.). *Feresa* is not seen in the northern part of the tuna grounds, towards the Gulf of California. Only three sightings are from south of the equator, where NMFS survey effort has been comparatively low: 25 animals at 02° 32′S, 94° 11′W on 17 January 1979; 9 at 07° 20′ S, 85° 13′ W on 6 December 1980, and 15 at 02° 27′ S, 109° 58′ W on 15 March 1981. In addition, during the IWC/IDCR research cruise in the eastern tropical Pacific in November and December 1982, one school of 8 animals without calves was seen at 08° 37′ S, 88° 04′ W (Donovan 1984).

Data are presented below on the first report of the pygmy killer whale from Peru, the most southerly record of this species in the eastern South Pacific.

On 30 November 1984 the mummified remains of a pygmy killer whale were discovered in one of the several dumps in the desert surrounding Pucusana, a small fishing town in central Peru (12° 30′ S, 76° 48′ W). At the same place, many tens of skeletons of several other small cetaceans were found, all victims of the Peruvian small cetacean fishery. In Pucusana most small cetaceans are caught in gill nets, with the remainder captured by a variety of other methods (Read et al. 1985; Van Waerebeek and Reyes 1986; Van Waerebeek et al. 1987). The majority of local fishing occurs well within 100 nautical miles of shore and mostly much closer.

The *Feresa attenuata* specimen we report consists of the head, the hyoids, six posterior lumbar vertebrae, the complete series of caudals (32), 23 chevron bones, both pelvic bones, the flippers, and the dorsal fin. The intact skull, covered by mummified skin, showed the rounded head typical of this species; all underlying soft tissue had disappeared. Sex and total length of the animal could not be determined. Initially the animal was thought to be physically immature considering the small size of the skull (339 mm condylobasal length) compared to the 352–405 mm range (X = 373 mm, n = 27) listed by Ross and Leatherwood (in press). However, fusion of the epiphyses of the caudal and lumbar vertebrae as well as in the flipper bones, the near closure of tooth pulp cavities, the flattening of the dorsal surface of the rostral portion of the premaxillae lying on the same